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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/736,820      | 12/14/2000  | Hao A. Chen          | 3620-036-01         | 8675             |

33432 7590 12/29/2004  
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| EXAMINER |
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RHEE, JANE J

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| ART UNIT | PAPER NUMBER |
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1772

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Applicati n No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/736,820             | CHEN ET AL.         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jane Rhee              | 1772                |  |

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 7-18,21,24-26,28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,19,20,22,23 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

1. The resubmitted claims 7-18,21,24-26,28-30 were previously withdrawn from further consideration from the examiner as being drawn to a non-elected invention in office action 2/25/2002. Applicant's election with traverse of claims 1-6,19-20,22-23,27 in the reply filed on 5/28/2002 is acknowledged. The traversal is on the ground(s) that there is no serious burden on the examiner to search all of the claims. This is not found persuasive because the method claims 7-18,21,24-26,28-30 are classified in 156/60, an entirely different class from the article claims which are classified in 428/57. The product as claimed can be made by another and materially different process (MPEP 806.05(f)). In the instant case the product can be made by another and materially different process such as mechanical welding.

The requirement is still deemed proper and is therefore made FINAL.

***Rejection Withdrawn***

2. The 35 U.S.C. 103(a) rejection of claims 1-6,19-20,22-23 over Del Rincon et al. in view of Peralt Anstalt has been withdrawn due to applicant's amendment in response 10/4/2004.

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3. The 35 U.S.C. 103 (a) rejection of claim 27 over Rincon in view of Boultinghouse has been withdrawn due to applicant's amendment in response 10/4/2004.

***New Rejections***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,5-6,22 are rejected under 35 U.S.C. 102(e) as being anticipated by Fricke et al. (6227759).

Fricke et al. discloses a floor surface (col. 1 line 11-12) comprising two or more polymeric flooring planks having edges (col. 2 lines 36-38), where the planks are connected to each other by chemical welding (col. 2 line 38-39), wherein the welding agent is present on at least one of the planks (figure 3 number 6a), and wherein the chemical agent comprises at least one solvent that at least bonds the edges of the planks (col. 3 lines 21-22). Fricke et al. discloses that the chemical welding agent is present on at least each edge (figure 2 number 6a) of each thermoplastic plank connected together to another

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thermoplastic plank (figure 2 number 1a, 1b). Fricke et al. discloses that the chemical welding agent is present on two opposite edges (figure 2 number 6a, 6b) of each individual plank (figure 2 number 1b). Fricke et al. discloses that the polymeric flooring plank is in the shape of a tile (figure 2 number 1a).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fricke et al. (6227759).

Fricke et al. discloses the floor surface described above. Fricke et al. fail to disclose that the chemical welding agent consists of tetrahydrofuran. Peralt Anstalt teaches two polymeric planks with a bonding agent of tetrahydrofuran for the purpose of connecting two sheets by temporarily dissolving and respectively plasticizing the plastics material so that a connection similar to a welded connection is obtained under pressure (col. 1 lines 25-30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Fricke et al. with a bonding agent of tetrahydrofuran in order to connect two sheets by temporarily dissolving and respectively plasticizing the plastics material so that a connection

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similar to a welded connection is obtained under pressure (col. 1 lines 25-30) as taught by Anstalt.

6. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fricke et al. in view of Park et al. (5837343).

Fricke et al. discloses a floor surface (col. 1 line 11-12) comprising two or more polymeric flooring planks having edges (col. 2 lines 36-38), where the planks are connected to each other by chemical welding (col. 2 line 38-39), wherein the welding agent is present on at least one of the planks (figure 3 number 6a), and wherein the chemical agent comprises at least one solvent that at least bonds the edges of the planks (col. 3 lines 21-22). Fricke et al. fail to disclose splines located between at least a portion of the polymeric planks.

Park et al. teaches a polymeric spline located between a portion of the polymeric planks (figure 2 number 46) for the purpose of holding the panels in precise vertical alignment (col. 5 lines 50-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Fricke et al. with splines located between at least a portion of the polymeric planks, wherein at least a portion of the planks and splines are connected to each other by chemical welding agent comprising at least one solvent that chemically welds at least the spline and plank together, wherein the chemical welding agent is applied to at least one of the edges of at least one of the individuals planks in order to hold the panels in precise vertical alignment (col. 5 lines 50-51) as taught by Park et al.

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7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fricke et al. in view of Park et al. and in further view of Peralt Anstalt (1178565).

Fricke et al. and Park et al. discloses the floor surface described above. Fricke et al. fail to disclose tha the chemical welding agent consists of tetrahydrofuran. Peralt Anstalt teaches two polymeric planks with a bonding agent of tetrahydrofuran for the purpose of connecting two sheets by temporarily dissolving and respectively plasticizing the plastics material so that a connection similar to a welded connection is obtained under pressure (col. 1 lines 25-30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Fricke et al. with a bonding agent of tetrahydrofuran in order to connect two sheets by temporarily dissolving and respectively plasticizing the plastics material so that a connection similar to a welded connection is obtained under pressure (col. 1 lines 25-30) as taught by Anstalt.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fricke et al. in view of Park et al. (5837343).

Fricke et al. discloses the floor surface described above. Fricke et al. fail to disclose that the polymeric flooring plank has a polymeric core with a laminate affixed on the surface of the core. Park et al. teaches polymeric flooring plank has a polymeric core (figure 1 number 12) with a laminate affixed on the surface of the core (figure 1 number 14) for the purpose of providing an improved composite structure presenting low friction properties that can incorporate into a

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surface and provide high dimensional stability and durability, together with a consist friction reducing property (col. 1 lines 51-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Fricke et al. with a laminate affixed on the surface of the core in order to provide a composite structure presenting low friction properties that can incorporate into a surface and provide high dimensional stability and durability, together with a consist friction reducing property (col. 1 lines 51-55) as taught by Park et al.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fricke et al. in view of Andrews (2495680).

Fricke et al. discloses the floor surface described above. Fricke et al. fail to disclose a welding agent that comprises at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank. Andrews teaches a welding agent that comprises at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank (col. 3 lines 41-46) for the purpose of developing a seam with strength equal to the strength of the plastic sheets (col. 1 liens 23-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Fricke et al. with a welding agent that comprises at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank in order to develop a seam with strength equal to the strength of the plastic sheets (col. 1 liens 23-24) as taught by Andrews.



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***Response to Arguments***

10. Applicant's arguments with respect to claims 1-6, 19-20, 22-23, 27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

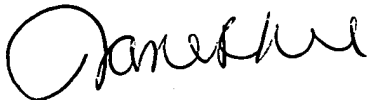
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax


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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jane Rhee  
December 15, 2004



HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

12/27/04